

ABSTRACT OF THE DISCLOSURE

A process for the desulfurization of a full boiling range naphtha stream is disclosed in which a full boiling range naphtha is concurrently split in catalytic distillation column reactor into a light and a heavy naphtha and the light naphtha thioetherified. Only the heavy naphtha is treated to remove organic nitrogen catalyst poisons then hydrodesulfurized. Both the light and the light naphtha streams may be subject to a final hydrodesulfurization in polishing reactor.